

**Preparation of three-in-one thin-layer hydrophobic catalyst electrode and membrane electrode assembly**

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## Abstract of CN 1269429 (A)

The preparation method of thin-layer hydrophobic catalytic layer electrode and membrane electrode three-into-one component is characterized by that the catalyst is made into ink, said ink can be directly or indirectly printed on the proton film to form membrane electrode three-into-one component. The composition of said ink includes (1) catalyst; (2) solvent made up by mixing water and organic solvent, the volume ratio of water and organic solvent is 1 : 1-10; (3) Nafion or Flemion proton conductor polymer; (4) soluble and volatile pore-forming agent; and (5) hydrophobic agent, and their weight ratio is 10 : 100-500 : 1-10 : 10-50 : 1-10. Said invention is simple in preparation and its electrode performance is excellent and life is long.

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